

Quiz 9: 2/9/15

Question 1

4pts Give two methods that mutual exclusion can be achieved.

Answers:

- Busy wait (half credit)
- Turn taking
- Spin lock
- Dekker's Algorithm
- Peterson's Algorithm
- TSL - Test set lock

Question 2

6pts Do the following examples need mutual exclusion?

Answers:

- a) Yes
- b) No
- c) No

```
/// a)
// Thread 1
x = x + 1;
// Thread 2
x = 2*x;
```

```
/// b)
// Thread 1
a = x+2;
// Thread 2
b = x*2;
```

```
/// c)
// Thread 1
x[4] = x[3] + x[2];
// Thread 2
x[1] = x[3] * x[4];
```